(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 4 August 2005 (04.08.2005)

(10) International Publication Number WO 2005/071023 A1

- (51) International Patent Classification7: C09D 7/12, 5/02
- (21) International Application Number:

PCT/EP2005/000697

- (22) International Filing Date: 21 January 2005 (21.01.2005)
- (25) Filing Language:

(26) Publication Language:

English

(30) Priority Data:

04075135.6 60/543,391

22 January 2004 (22.01.2004) 11 February 2004 (11.02.2004)

- (71) Applicant (for all designated States except US): AKZO NOBEL N.V. [NL/NL]; Velperweg 76, NL-6824 BM Amhem (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KLLJN, Teunis, Abram [NL/NL]; Beresteyn 2, NL-3252 CK Goedereede (NL). TWENE, Derrick [GB/NL]; Westwal 87, NL-4461 CN Goes (NL). MESTACH, Dirk, Emiel, Paula [BE/BE]; Elsendonkstraat 79, B-2560 Nijlen (BE).
- (74) Agent: SCHALKWIJK, Peter, Cornelis; Akzo Nobel N.V., Intellectual Property Department (Dept. AIP), P.O. Box 9300, NL-6800 SB Arnhem (NL).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CL, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: STAIN BLOCKING WATER BORNE COATING COMPOSITION

(57) Abstract: The invention relates to a stain blocking water borne coating composition, preferably for clear coats, comprising an organic binder and as stain blocking agent at least one type of inorganic nano-particles having a layered structure and a crystal structure with positively charged layers. Further, the invention relates to a method for coating a substrate comprising water extractable staining agents wherein the substrate is coated with an organic water borne coating composition comprising as stain blocking agent at least one type of inorganic nano-particles, preferably having a layered structure and a crystal structure with positively charged layers and to coated substrates obtainable by this method.